REMARKS

Claims 1, 3-6, 10, 11, 16, 17, 19-22, 26, 27, 32, 33, 35-38, 42, 43, and 48 are pending in the present application. Claims 2, 7-9, and 12-15 are canceled. Claims 1, 3, 6. 10, 11, 16, 17, 19, 22, 26, 27, 32, 33, 35, 38, 42, 43, and 48 are amended. More particularly, independent claims 1, 17, and 33 are amended to incorporate features originally presented in claims 2, 7-9, 12-15, 18, 23-25, 28-31, 34, 39-41, and 44-47. Reconsideration of the claims is respectfully requested.

I. Examiner Interview

A telephone interview was conducted with the Examiner on April 14, 2005. Applicants thank the Examiner for the courtesies extended during the interview. Applicants' representative proposed several amendments to the claims. The Examiner agreed to reconsider the rejection with respect to the proposed amendments, but no agreement was reached.

II. 35 U.S.C. § 112, Second Paragraph

The Office Action rejects claims 1, 2, 4, 5, 10-18, 20, 21, 26-34, 36, 37 and 42-48 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which applicants regard as the invention. Independent claims 1, 17, and 33 are amended to incorporate subject matter from claims 7, 23, and 39, respectively. Therefore, claims 1, 17, and 33 overcome the rejection, and Applicants respectfully request withdrawal of the rejection of claims 1, 2, 4, 5, 10-18, 20, 21, 26-34, 36, 37 and 42-48 under 35 U.S.C. § 112, second paragraph.

III. 35 U.S.C. § 102, Anticipation

The Office Action rejects claims 1-48 under 35 U.S.C. § 102(e) as being anticipated by *Jensen et al.* (U.S. Patent No. 6,459,809). This rejection is respectfully traversed.

Jensen teaches searching and filtering content streams using contour transformations. The system and methods of *Jensen* analyze an area of interest and assign a semantic value. With regard to a semantic value, *Jensen* states:

> The semantic value(s) provided by contour transformations are used to position the data set area within a dictionary of archetypes. These archetypal semantic values may have textual or database labels such as "nose", "Upper-Case A", or "snail", assigned to them. Semantic values which characterize one or more archetypes are compared with the semantic values derived from the new data set, to assign the data set to an archetype. If none of the archetypes fit the new data set within specified tolerances, a new archetype may be created with assistance from the user.

Jensen, col. 2, lines 53-62. Thus, a semantic value is used only to categorize an area of interest as an archetype. Semantic values are used to build a dictionary of archetypes. *Jensen* states:

> During the storing step 506, the semantic value produced by the contour transformation and/or associated information is stored within a dictionary of archetypes. This may involve comparing the new semantic value with semantic values for archetypes previously stored in the dictionary. For instance, if the semantic value is in a range or region of values belonging to an existing archetype ("noses" or "starfish", for instance) then the corresponding data set content object (or its address) might be added as one more example of that archetype. If the semantic value is more than a predetermined distance from any existing archetype's semantic value(s) then a new archetype could be added.
>
> Archetype signals are discussed in connection with FIG. 7, but in general they may include one or more semantic values obtained from contour transformations plus a copy of the content object (or a pointer to it); an archetype may also contain a textual description or a list of keywords. The present invention can be used in a process which categorizes content and associates keywords with the content to permit subsequent searches using conventional text-based search engines, conventional relational or hierarchical databases, directory services such as Novell's NDS, or the like.

Jensen, col. 9, line 62, to col. 10, line 16. *Jensen* also teaches that some archetypes may be blocked or rerouted. Jensen states:

> During the blocking or removing step 508, the semantic value produced by the contour transformation is used to block or reroute at least a portion of a digital data set. The portion may be an individual file, a record in a database, or an entire digital data set, for instance. This step 508 may use a dictionary of archetypes if several objectionable content objects, or several objectionable combinations of individually innocuous objects or features, are to be blocked or rerouted. For instance, a dictionary of archetypes could be used to identify sexually explicit images. However, in some embodiments a complex dictionary is not needed, because only the semantic values themselves and a fixed set of prohibited values are used. If the semantic value for a given portion of the content stream falls within the fixed set of prohibited semantic values, then that portion of the content is blocked or rerouted in a predefined manner. Conventional tools and techniques for preventing further transmission of data and/or rerouting data may be used.

Jensen, col. 10, lines 17-34. Thus, Semantic values are not a score used to quantify an amount of objectionable content. A contour either has a semantic value belonging to an archetype associated with objectionable content or it does not. If the contour or area of interest has a semantic value belonging to an archetype that is to be blocked, then it is blocked.

In contradistinction, the present invention provides a method, apparatus, and computer program product for identifying objectionable content based on an **amount** of objectionable content, as compared to a plurality of thresholds. A user profile includes parameters for identifying objectionable content and a plurality of thresholds for a plurality of categories of objectionable content. Content requested by the user is then analyzed using the parameters to identify an amount of objectionable content. A score is determined for each category. If a score for a category is above the threshold for that category, then the objectionable content is stored in an objectionable content data structure.

Jensen does not teach the limitations of the present invention. For example, *Jensen* does not teach or suggest a threshold that is obtained from a user profile, as recited in claim 1, for example, and originally presented in claims 2, 9, 11, 18, 25, 30, 34, 41, and 46. The Office Action alleges that *Jensen* teaches this limitation at col. 9, lines

54-61; col. 10, lines 18-40; and, col. 11, lines 24-55. Applicants respectfully disagree. The cited portions are as reproduced above and as follows:

> A dictionary of archetypes 608 may be used within a cataloging and/or searching system 100 to process content and identify objects. The dictionary of archetypes 608 may begin empty for a given content stream or user or session, and be built as archetypes 610 are added to it. Alternatively, the dictionary of archetypes 608 may already contain archetypes 610, and during a particular use may then be either static (read-only) or modifiable. As discussed, the content objects are not text but rather include some signal-type data that is defined by some n-space (e.g., color may be defined by a 3-space as RGB) and further characterized by being recognizable as objects, nested objects, and/or overlapping objects.
>
> Each archetype 610 within the dictionary 608 includes a semantic value 612 produced by a contour transformation of content. The archetype 610 may include a single semantic value 612, a range or region of semantic values 612, or a set of discrete semantic values 612. The semantic value(s) from a newly transformed image (or a transformed image being presented to the dictionary of archetypes for the first time) is compared to the archetype 610 semantic values 612 to determine if the data set object(s) represented by the archetype 610 are likely to be present in the image. Comparison need not be done with every archetype 610 in every case, even if no match exists, because the archetypes 610 can be organized in ordered trees or hash lists or otherwise ordered according to their semantic values 612 to permit efficient searches of those semantic values 612.
>
> For instance, if a semantic value from a given image is in (or within a specified distance of) the region of semantic values 612 belonging to an archetype 610 with a label 614 of "nose", then a nose is likely to be present in the image.

Jensen, col. 11, lines 24-55. Neither the cited portions nor any other portions of *Jensen* teach or suggest obtaining a plurality of thresholds for a plurality of categories of objectionable content from a user profile. *Jensen* makes no mention of a user profile. In fact, the words "profile" and "threshold" do not even appear in the reference.

At best, *Jensen* teaches that a user may add archetypes to a user specific archetype dictionary as new contours are encountered and that an area of interest is identified as

objectionable if its semantic value is within a predetermined distance from an existing archetype. The user specific archetype dictionary may be loosely interpreted as a "profile," and the predetermined distance may be loosely interpreted as a "threshold." However, there is no teaching whatsoever in *Jensen* that a threshold is obtained from a user profile or that a plurality of thresholds are obtained for a plurality of categories of objectionable content. Without any outside teaching, one must assume that the predetermined distance in *Jensen* is defined programmatically within the code of the analysis component and not from a user profile.

Furthermore, *Jensen* does not teach or suggest determining a score for requested content for each of a plurality of categories of objectionable content. The Office Action alleges that *Jensen* teaches this feature at col. 7, lines 46-64, and col. 9, lines 54-61. Applicants respectfully disagree. The cited portions of *Jensen* are as follows:

> The contour transformation above, applied to a series of images, produces a single number or set of numbers per region of interest in each image. These semantic values can be interpreted to form a group of contour similarity classes when similar images are compared as a group. For example, the semantic values for pictures of "chairs" or "noses" or "X's", will tend to be grouped together. The contour transformation, therefore, defines contour similarity classes, and more specifically contour similarity classes which depend not only on the contour but also on ratios. Contour similarity classes (with or without ratios) can be used to form a dictionary of archetypes, which includes semantic values and corresponding interpretations in the form of text labels, database keys, or other indicia. For instance, a range of semantic values specified by the dictionary might define "chairs", while another range defines "noses", and so on. Regions may generally be used in some embodiments in the role of a range as discussed herein, and sets of semantic values may be used in the role of a single semantic value.

Jensen, col. 7, lines 46-64.

> During a using step 504, the semantic value(s) obtained with the contour trans- formations are used in one or more ways. For instance, the semantic values may be used to build a dictionary of archetypes during a step 506, to identify and block objectionable content during a step 508, and/or to search for particular content objects or object

> features in a database or other collection of images or other digital data sets during a step 510.

Jensen, col. 9, lines 54-61. Neither the cited portions nor any other portions of *Jensen* teach or suggest determining a score for a plurality of categories of objectionable content from a user profile. *Jensen* makes no mention of a score. In fact, the word "score" does not even appear in the reference. The semantic value is not a score that is compared to a threshold, as in the presently claimed invention. Rather, the semantic value of *Jensen* is analogous to a fingerprint, a piece of data that is used to identify something. The semantic value of *Jensen* is not indicative of an amount of objectionable content, as recited in claim 1, for example.

Moreover, *Jensen* does not teach or suggest determining a score for each of a plurality of categories of objectionable content, as recited in claim 1, for example, and originally presented in claims 13, 29, and 45. The Office Action alleges that *Jensen* teaches this feature at col. 7, lines 55-64, and col. 10, lines 18-27, which are reproduced above. Once again, the Office Action cites seemingly arbitrary portions of *Jensen* without proffering any analysis as to how the teachings somehow anticipate the claimed subject matter other than by supplying a summary of the teachings. Applicants submit that a teaching of archetypes that define categories of content simply does not anticipate determining a score for the requested content for each of the plurality of categories of objectionable content based on the amount and category of objectionable content contained in the requested content, wherein the scores are compared to a plurality of thresholds for categories of objectionable content, as in the claimed invention.

The applied reference does not teach or suggest each and every claim limitation; therefore, *Jensen* does not anticipate claim 1, for example. Independent claims 17 and 33 recite subject matter addressed above with respect to claim 1 and are allowable for similar reasons. Since claims 3-6, 10, 11, 16, 19-22, 26, 27, 32, 35-38, 42, 43, and 48 depend from claims 1, 17, and 33, the same distinctions between *Jensen* and the invention recited in claims 1, 17, and 33 apply for these claims. Additionally, claims 3-6, 10, 11, 16, 19-22, 26, 27, 32, 35-38, 42, 43, and 48 recite other additional combinations of features not suggested by the reference.

More particularly, claims 3, 19, and 35 recite providing at least one entry from the objectionable content data structure to a user, receiving input from the user categorizing

the at least one entry as objectionable or non-objectionable, and adjusting at least one predetermined threshold if the input from the user categorizes the at least one entry as non-objectionable. The Office Action alleges that *Jensen* teaches these features because *Jensen* teaches refinement of archetypes at col. 4, lines 49-54. *Jensen* does indeed teach refinement of archetypes; however, nowhere does *Jensen* teach adjusting a threshold. The Office Action proffers no explanation as to why refinement of archetypes is somehow equivalent to adjusting a threshold. The applied reference simply does not teach or suggest each and every limitation; therefore, *Jensen* does not anticipate claims 3, 19, and 35.

Furthermore, claims 16, 32, and 48, which depend from claims 3, 19, and 35, respectively, recite determining a new value for the at least one predetermined threshold using one of an algorithm, a function, an inference engine, a neural network, an expert system, or an intelligent computing system. The Office Action alleges that *Jensen* teaches this feature because *Jensen* teaches adjusting thresholds using neural networks at col. 8, lines 57-67, and col. 12, lines 49-52. *Jensen* does indeed teach refining archetypes using neural networks; however, this is in no way equivalent to adjusting a **threshold** using a neural network. Claims 11, 27, and 43 are allowable for similar reasons.

With respect to claims 10, 26, and 42, the Office Action alleges that *Jensen* teaches thresholds being dynamically adjustable because *Jensen* teaches that archetypes may be updated at col. 11, lines 56-57. Applicants respectfully disagree. Simply stated, an archetype is not a threshold that is compared to a score that is indicative of an amount of objectionable content, as recited in the instant claims. The applied reference clearly fails to teach or suggest all limitations of instant claims; therefore, *Jensen* does not anticipate claims 10, 26, and 42.

Therefore, Applicants respectfully request withdrawal of the rejection of claims 1, 3-6, 10, 11, 16, 17, 19-22, 26, 27, 32, 33, 35-38, 42, 43, and 48 under 35 U.S.C. § 102(e).

Furthermore, *Jensen* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. *Jensen* actually teaches away from the presently claimed invention because it teaches blocking each arc of interest that is associated with a set of archetypes, as opposed to determining a score indicative of an

amount of objectionable content and comparing the score to a threshold, as in the presently claimed invention. Absent the Office Action pointing out some teaching or incentive to implement *Jensen* with a plurality of thresholds for a plurality of categories of objectionable content and a scoring system, one of ordinary skill in the art would not be led to modify *Jensen* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Jensen* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

IV. Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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